

AVIFAUNA OF CENTRAL TULE VALLEY, WESTERN BONNEVILLE BASIN

Peter Hovingh¹

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Fautin (1946) described the flora and fauna of several northern desert biotic communities in Tule Valley, located 50 km west of Delta, Utah, in Millard County of western Bonneville Basin. His study during 1939 (June to September) and 1940 (April to September) included a description of greasewood (*Sarcobatus vermiculatus*) and pickleweed (*Alleurolefea occidentalis*) communities. From 1980 through 1991 while inventorying the aquatic habitats of Tule Valley, I noted the avifauna utilizing wetlands, springs, adjacent greasewood and pickleweed communities, and saline flats. This note reports on the avifauna occurring within the two communities and compares the 1980-91 faunal listing with that reported previously by Fautin (1946). Comparisons are also made with Fish Springs National Wildlife Refuge, located 50 km north of the Tule Valley springs. This study identifies changes in raptors and songbirds that have occurred over 40 years and notes the differences between natural springs and wetlands and those dedicated to waterfowl management.

DESCRIPTION OF THE TULE VALLEY AQUATIC ENVIRONMENTS

Within the greasewood and pickleweed communities of central Tule Valley are some 25 fissure-fault springs and associated wetlands. Saline flats covered in part by water from saline seepage springs occur to the east and west of these fissure fault springs. The springs-wetlands vary in size from 100 m² to over 97,000 m². Coyote Springs, with a total of 195,000 m². Conductivity of the aquatic systems varies from 1200 spring seepage to greater than 93,000 μ hos per cm (3000) wetlands and saline

ponds). Three-cornered bulrush (*Scirpus americanus*) and salt grass (*Distichlis spicata*) are the dominant emergent species, with *Phragmites australis*, *Typha douingensis*, and *Scirpus acutus* occurring in highly localized stands. Tamarisk (*Tamarix ramosissima*) is the only shrub growing within some springs-wetlands but was not noted by Fautin (1946).

METHODS

A total of 36 visits were made to Tule Valley between 1980 and 1991, with 10 visits of two-day durations occurring in 1981. Inventories were conducted during each month (except January) with emphasis during March, May, and June. Birds were inventoried by random encounters, and unidentified species were not pursued. Nomenclature follows that of Peterson (1990).

RESULTS AND DISCUSSION

Table 1 lists the 80 species of birds identified during 1980-91, the months they were encountered, and those species also reported by Fautin (1946). Mallard (scientific names noted in Table 1), Northern Harrier, Horned Lark, Common Raven, and Marsh Wren were encountered year-round and are considered permanent residents. Almost half (31) of the species inventoried during this study were observed two or fewer times (dates included in Table 1) and are considered casual or transient visitors. The single Palm Warbler, a casual bird in Utah (Behle et al. 1985), was identified by its characteristic tail movement as previously observed by me on numerous occasions during annual

¹ 721 Second Avenue, Delta, Utah 84303

TABLE 1. Continued.

	Month of Year												Specific dates ^{oo}
	J	F	M	A	M	J	J	A	S	O	N	D	
ANATIDAE													
Canada Goose <i>Branta canadensis</i>			x										3/7/57
Green-winged Teal <i>Anas crecca</i>				x									4/27/51
*Mallard <i>Anas platyrhynchos</i>		x	x	x	x	x	x	x	x	x	x	x	
Northern Pintail <i>Anas acuta</i>			x						x			x	
Cinnamon Teal <i>Anas cyanoptera</i>			x	x	x	x	x	x	x				
American Wigeon <i>Anas americana</i>			x						x				
Canvasback <i>Aythya valisineria</i>			x										3/22/52
Redhead <i>Aythya americana</i>			x	x		x							
Merganser <i>Mergus sp.</i>			x										
Ruddy Duck <i>Oxyura jamaicensis</i>			x			x					x		
CATHARTIDAE													
*Turkey Vulture <i>Cathartes aura</i>													
ACCIPITRIDAE													
*Northern Harrier <i>Circus cyaneus</i>		x	x	x	x	x	x	x	x	x	x	x	
*Sharp-shinned Hawk <i>Accipiter striatus</i>													
*Cooper's Hawk <i>Accipiter cooperii</i>													
*Swainson's Hawk <i>Buteo swainsoni</i>													
*Red-tailed Hawk <i>Buteo jamaicensis</i>													
Rough-legged Hawk <i>Buteo lagopus</i>			x										3/7/51
*Golden Eagle <i>Aquila chrysaetos</i>			x										3/20/90
*American Kestrel <i>Falco sparverius</i>									x				9/25/52; 9/29/54
*Prairie Falcon <i>Falco mexicanus</i>				x	x								4/4/52; 5/11/55
RAMIDAE													
Virginia Rail <i>Rallus limicola</i>			x					x			x		
*Sora <i>Porzana carolina</i>				x				x	x				
American Coot <i>Fulica americana</i>				x	x	x	x	x	x	x			
COLUMBIDAE													
Killdeer <i>Charadrius vociferans</i>			x	x	x	x							
RECURVIBROCEPHALAE													
Black-necked Stilt <i>Himantopus mexicanus</i>								x					5/21/57

TABLE 1. Continued.

	Month of Year												Specific dates ^{oo}
	J	F	M	A	M	J	J	A	S	O	N	D	
SCOLOPACIDAE													
Spotted Sandpiper <i>Actitis macularia</i>								x					8/21/57
Western Sandpiper <i>Calidris mauri</i>				x									4/20/56
Dunlin <i>Calidris alpina</i>					x								4/20/56
Common Snipe <i>Gallinago gallinago</i>			x	x	x			x	x	x	x		
LARIDAE													
Gulls <i>Larus sp.</i>			x										
COLUMBIDAE													
° Mourning Dove <i>Zenaida macroura</i>						x	x	x	x	x			
STRIGIDAE													
° Burrowing Owl <i>Athene cucularia</i>													
CAPRIMULGIDAE													
° Common Nighthawk <i>Chordeiles minor</i>													
APODIDAE													
White-throated Swift <i>Acrionectes saxatilis</i>				x	x	x							
PICIDAE													
Northern Flicker <i>Colaptes auratus</i>										x		x	10/25/51; 12/6/51
TYRANNIDAE													
° Western Kingbird <i>Tyrannus verticalis</i>													
ALAUDIDAE													
° Horned Lark <i>Eremophila alpestris</i>	x	x	x	x	x	x	x	x	x	x	x	x	
HIRUNDINIDAE													
Violet-green Swallow <i>Tachycineta thalassina</i>						x		x					5/5/51; 6/13/52
° Barn Swallow <i>Hirundo rustica</i>									x				9/19/51
CORVIDAE													
° Common Raven <i>Corvus corax</i>	x	x	x	x	x	x	x	x	x	x	x	x	
TROGLODYTIDAE													
Marsh Wren <i>Cistothorus palustris</i>	x	x	x	x	x	x	x	x	x	x	x	x	
MUSCICAPIDAE													
Mountain Bluebird <i>Sialia currucoides</i>										x			5/24/51
MIMIDAE													
° Northern Mockingbird <i>Mimus polyglottos</i>													
° Sage Thrasher <i>Oreoscoptes montanus</i>						x	x	x	x				
MOTACILLIDAE													
American Pipit <i>Anthus rubescens</i>	x	x	x	x									
LANIIDAE													
° Loggerhead Shrike <i>Lanius ludovicianus</i>								x	x				

TABLE 1. Continued.

	Month of Year												Specific dates ^o
	J	F	M	A	M	J	J	A	S	O	N	D	
STURNIDAE													
Starling <i>Sturnus vulgaris</i>		x	x										2/21/51;3/7/51
EMBERIZIDAE													
°Yellow Warbler <i>Dendroica petechia</i>													
°Yellow-rumped Warbler <i>Dendroica coronata</i>				x	x				x	x			
Palm Warbler <i>Dendroica palmarum</i>									x				9/19/51
°Common Yellowthroat <i>Geothlypis trichas</i>					x	x	x	x					
°Yellow-breasted Chat <i>Icteria virens</i>													
°Green-tailed Towhee <i>Pipilo chlorurus</i>													
American Tree Sparrow <i>Spizella arborea</i>											x	x	9/16/50; 12/6/51
°Brewer's Sparrow <i>Spizella breweri</i>													
°Vesper Sparrow <i>Pooecetes gramineus</i>									x				9/20/51
Lark sparrow <i>Chondestes grammacus</i>					x								5/2/57
°Black-throated Sparrow <i>Amphispiza bilineata</i>				x	x	x	x						
°Sage Sparrow <i>Amphispiza belli</i>	x	x	x	x	x	x							
°Lark Bunting <i>Calamospiza melanocorys</i>													
Savannah Sparrow <i>Passerculus sandwichensis</i>			x	x	x	x	x	x	x	x	x	x	
Fox Sparrow <i>Passerella iliaca</i>									x				10/20/90
°Song Sparrow <i>Melospiza melodia</i>												x	12/5/51
Lincoln's Sparrow <i>Melospiza lincolni</i>				x									4/4/51
°White-crowned Sparrow <i>Zonotrichia leucophrys</i>				x					x				
Junco <i>Junco sp.</i>				x									
Red-winged Blackbird <i>Aegialais phoeniceus</i>			x	x	x	x	x						
Western Meadowlark <i>Sturnella neglecta</i>			x						x	x	x	x	x
Yellow-headed Blackbird <i>Xanthocephalus xanthocephalus</i>				x	x	x	x		x				
Brewer's Blackbird <i>Euphagus cyanocephalus</i>			x						x				
Brown-headed Cowbird <i>Molothrus ater</i>				x	x	x	x	x	x				
FRINGILLIDAE													
American Goldfinch <i>Carduelis tristis</i>												x	12/6/51
PASSERIDAE													
House Sparrow <i>Passer domesticus</i>										x			10/25/51

^oIdentified by Fautin, 1946^oDates in right column are for two or more individuals.

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